<u>In the claims:</u>

Please amend the claims as follows:

1. (currently amended) A device for measuring the volume of liquid in a container, said device comprising,

a float moveable in response to changes in the volume of said liquid in said container,

a magnetically conductive member having <u>a north pole, a south pole, a</u> magnetic field passing therethrough, <u>and an axis defined by said north and said south poles,</u>

<u>said magnetically conductive member having a contoured shape and a thickness perpendicular to said axis that varies across said contoured shape wherein a greater magnetic field passes through thicker portions of said contour than thinner portions thereof,</u>

a sensor for sensing the strength of a portion of said magnetic field and for generating a signal responsive to said strength,

said sensor positioned in said magnetic field and spaced from said magnetically conductive member, and

means connected to said float for moving one of said magnetically conductive <u>member</u> ~~members~~ and said sensor relative to the other of said magnetically conductive member and said sensor wherein said signal generated by said sensor is a function of said volume of said liquid in said container.

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2. (original) The device of claim 1 wherein the relationship between a level of said liquid in said container to the volume of said liquid is not linear.

3. (original) The device of claim 1 and further comprising means responsive to said signal for displaying the volume of liquid in said container.

4. (original) The device of claim 1 wherein the spacing between said magnetically conductive member and said sensor changes in response to movement of said float.

5. (original) The device of claim 1 wherein said magnetically conductive member is a magnet.

6. (withdrawn) The device of claim 1 and further comprising

a magnet remote from said magnetically conductive member, and

a flux concentrator for directing flux of a magnetic field through said magnetically conductive member and across said sensor.

7. (original) The device of claim 1 wherein the strength of said magnetic field passing through said magnetically conductive member is stronger through some portions thereof than through other portions thereof.

8. (canceled)

9. (original) The device of claim 1 wherein said sensor is a Hall-Effect sensor.

10. (currently amended) The device of claim 1 further wherein the ~~electronic~~ device is a fuel gauge.

11. (original) The device of claim 1 further wherein the liquid is fuel.

12. (original) The device of claim 11 further wherein the fuel includes methanol.

13. (canceled)

14. (canceled)

15. (withdrawn) The device of claim 14 further wherein the Hall-Effect sensor is linear.

16. (canceled)

17. (canceled)

18. (original) The device of claim 13 further including an electronic device that receives the electronic output of the magnetic sensor and indicates that volume of the fuel in the container.

19. (canceled)

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (new) A device for measuring the volume of liquid in a container, said device comprising,

a float moveable in response to changes in the volume of said liquid in said container,

a magnetically conductive member having a magnetic field passing therethrough,

said magnetically conductive member having a contoured shape and a thickness perpendicular to a direction of magnetic flux emanating from said conductive member, said thickness varying across said contoured shape wherein a

greater magnetic field passes through thicker portions of said contour than thinner portions thereof,

a sensor for sensing the strength of a portion of said magnetic field and for generating a signal responsive to said strength,

said sensor positioned in said magnetic field and spaced from said magnetically conductive member, and

means connected to said float for moving one of said magnetically conductive members and said sensor relative to the other of said magnetically conductive member and said sensor wherein said signal generated by said sensor is a function of said volume of said liquid in said container.